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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/603,622	06/26/2000	Eiichiro Kawakami	32011-164584	3193

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EXAMINER

SHAW, JOSEPH D

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 03/22/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/603,622

Applicant(s)

KAWAKAMI ET AL.

Examiner

Joseph D Shaw

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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**DETAILED ACTION**

***Claim Objections***

1. Claim 1 is objected to because of the following informalities:
  - a. The word "address" in the last line of claim 1 should be "addressed."Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gonno (6,404,739) in view of Miller et al. (StarBurst Multicast File Transfer Protocol (MFTP) Specification).

- a. As per claim 1, Gonno teaches:
  - a main station (transmitter; col. 5, line 66);
  - plural substations connected to said main station by a common transmission line (the receivers may be placed in one network; col. 1, lines 56-57; col. 6, lines 1-6; Figs. 9A, 9B);
  - a data transmitter which transmits data addressed to all of said plural substations (cols. 5-6, lines 66-67, 1-2);
  - plural data receivers which receive said data, provided in said one or more substations (col. 6, lines 1-2);

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plural response transmitters which transmit a carrier as a response message (NAK), only when said data could not be received normally, provided on said plural substations (col. 6, lines 21-24); and

wherein, whenever said main station receives a certain signal wave, said main station judges the signal wave said carrier transmitted from one or more of said plural substations and retransmits said data addressed to all of said plural substations (determines if retransmission signal NAK was received and retransmits data; data is transmitted across the broadcast link to all substations; Fig. 5; col. 7, lines 54-67; col. 11, lines 41-57.

However, Gonno does not explicitly teach a message transmitter which transmits a query message addressed to all of said plural substations after said data are transmitted, to inquire whether reception was normal, provided in said main station. Miller teaches a multicast transmission environment that makes use of a Status Request Message that is sent from the server to the client to query it for its reception status. Miller also teaches that the query can be sent in broadcast or multicast mode (addressed to all the recipients of the data; page 50, section 12.2.4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include inquiring all nodes about the reception status of data as taught by Miller in the method of Gonno because this Status Request Message would allow Gonno to reliably broadcast messages without knowing

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explicitly knowing each of the recipients of the broadcast messages and without having to use congestion causing ACK messages to ensure reliability.

- b. As per claim 2, Gonno discloses the claimed invention modified by Miller as described above and furthermore teaches:

the main station receiving said carrier within a prescribe period of time (there is a predetermined waiting time and the transmitter receives and totals retransmission requests; col. 9, lines 25-28).

- c. As per claim 3, Gonno discloses the claimed invention modified by Miller as described above and furthermore teaches:

the prescribed period of time being the period until the time to start the next transmission of the data (transmitting more data when the period of time for waiting for retransmission requests is up; Fig. 5).

- d. As per claims 4 and 5, Gonno discloses the claimed invention modified by Miller as described above and furthermore teaches:

the main station determining that all of said plural substations were able to receive said data normally, when said main station does not receive said carrier within a prescribed period of time; and

the main station effecting the next data transmission when said carrier is not received within a prescribed period of time (Fig. 5; col. 11, lines 31-40).

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e. As per claims 6 and 7, Gonno discloses the claimed invention modified by Miller as described above and furthermore teaches:

the main station determining that any of said plural substations were unable to receive said data normally, when said main station receives said carrier within a prescribed period of time; and

the main station re-transmitting said data when the carrier is received within a prescribed period of time (Fig. 5; col. 11, lines 41-57).

f. As per claim 8, Gonno discloses the claimed invention modified by Miller as described above and furthermore teaches:

the main station terminating the transmission of said data and effecting the transmission of next data when said carrier is received after the same data have been transmitted a prescribed number of times (limiting the number of retransmissions; col. 10, lines 25-32).

g. As per claims 10 and 11, Gonno discloses the claimed invention modified by Miller as described above and furthermore teaches:

said plural substations, when said normally received data are received once more, deleting said data; and

said plural substations, when said data that could not be normally received are received once more, store said data (the receivers determine if they have already received the packets and if so, delete the packets, otherwise store them; Fig. 7; col. 13, lines 10-35).

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3. Claim 9 rejected under 35 U.S.C. 103(a) as being unpatentable over Gonno (6,404,739) in view of Miller et al. (StarBurst Multicast File Transfer Protocol (MFTP) Specification) as applied to claim 8 above, and further in view of Gagne et al. (5,473,608).

h. As per claim 9, Gonno discloses the claimed invention modified by Miller as described above. However, the Gonno/Miller system does not explicitly teach the main station changing said prescribed number of times. Gagne teaches a method of communications in a distributed network that includes a user-defined timeout (col. 18, lines 5-6) and other customizable communication primitives (col. 2, lines 61-67, col. 3, lines 1-3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include customizable communication primitives (the main station changing said prescribed number of times) as taught by Gagne in the system of Gonno/Miller because customizable communication primitives allow for specific, customized communications based on the users needs as taught by Gagne (col. 2, line 67, col. 3, lines 1-3).

#### ***Response to Arguments***

4. Applicant's arguments filed February 21<sup>st</sup>, 2004 with respect to claims 1-8 and 10-11 have been considered but are moot in view of the new ground(s) of rejection.

5. Applicant's arguments filed February 21<sup>st</sup>, 2004 with respect to claim 9 have been fully considered but they are not persuasive.

i. In response to applicant's argument that the Gagne reference does not explicitly teach the use of retransmission limits, the Examiner

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points out that the Gagne use of timeouts allow for retransmission as many times as desired before the timeout expires (col. 18, lines 5-15). Thus, the timeout counter places a limit on the number of retransmissions that can occur and is capable of performing the same use. This use of timeouts by Gagne does not require the other limitations suggested by the applicant because it is only used to fill the limitation of changing the prescribed number of retransmissions.


#### **Conclusion**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D Shaw whose telephone number is 703-305-0094. The examiner can normally be reached on Monday - Thursday and alternate Fridays, 7am - 4pm.

7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 703-305-4003. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Joseph Shaw

  
**RUPAL DHARIA**  
**SUPERVISORY PATENT EXAMINER**